

Nevada Division of Environmental Protection Bureau of Water Pollution Control Groundwater Protection Branch Underground Injection Control Program



GUIDANCE DOCUMENT

General Permit GU07NDOT003 for NDOT Light-Use Maintenance Facilities

General Information: The Nevada Division of Transportation (NDOT) currently has seventeen lightuse maintenance facilities authorized to discharge to groundwater of the State of Nevada under General Permit GNV9800001. GNV9800001 authorized discharge of effluent from oil/water separators throughout the State of Nevada. GNV9800001 became effective on July 21, 1998 and expired July 21, 2003. However, all facilities have been authorized to continue discharging under GNV9800001 until a new permit was approved by the Bureau of Water Pollution Control pursuant NRS 223.B127. The General Permit GU07NDOT003 serves to replace GNV9800001 and authorize discharge from oil/water separators or superior pre-treatment devices for NDOT facilities only. It is expected that additional NDOT light-use² maintenance facilities may be authorized to discharge under this permit.

Discharge Characteristics: NDOT light-use² maintenance facilities covered under General Permit GU07NDOT003 may discharge from one or both of the following:

- 1. existing pre-treatment devices for motor vehicle waste disposal wells (MVWDWs)¹ that were in operation or under construction on or before April 5, 2000; and
- existing and/or proposed pre-treatment devices at vehicle wash pads not meeting the definition of MVWDWs.

GU07NDOT003 permits discharge from one or both of the devices described above to groundwater of the State of Nevada via either:

- a. A subsurface fluid distribution system (leachfield); or
- b. Surface infiltration basins.

The primary contaminants at these locations are oil, grease, other petroleum-related products and sediment. This permit ensures the implementation of a Best Management Practice (BMP) Plan to properly manage on-site storage and use of potential pollutants that cannot be treated by the pretreatment device(s) so they do not enter the waste stream; to minimize the pollutant concentrations before discharge enters the pre-treatment device; and to ensure appropriate maintenance of the pre-treatment device(s) to minimize re-suspension of trapped pollutants. Monitoring will ensure that pollutants such as volatile organic compounds (VOCs) that are not treated by the pre-treatment device are kept out of the waste stream. If these pollutants are detected above Federal or State drinking water standards, a remedial action plan will be required to be implemented within thirty (30) days to remedy the conditions creating the exceedance and follow-up monitoring shall occur within ninety (90) days of knowledge of the exceedance.

¹ According to NAC 445A.8282, a "motor vehicle waste disposal well (MVWDW)" is a "well that receives or has received fluids from the repair and maintenance of vehicles, including, without limitation, fluids from an auto body repair shop, an automotive repair shop, a new or used car dealership, a specialty repair shop or any other facility that repairs or maintains vehicles."

² light-use maintenance stations are those used for infrequent, minor repairs.

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Legal Authority: A pre-treatment device is defined as a point source by NRS 445A.395 and is prohibited from discharging into any waters of the state without a permit by NRS 445A.465. This general permit regulates effluent discharged into or above groundwater (where pollutants could be carried into groundwater, pursuant to NRS 445A.465), which is not otherwise regulated by an existing individual discharge permit or underground injection permit, or local ordinance or regulation which meets or exceeds the requirements of this permit. Authority for issuance of a general discharge permit is found at NRS445A.475 and NAC 445A.266 through NAC 445A.272, inclusive.

Eligibility and Discharge Limits: Any Nevada Division of Transportation light-use² maintenance station is eligible for coverage under this permit if it is discharging to an existing motor vehicle waste disposal well (MVWDW¹) through a pre-treatment device that was operational or under construction by April 5, 2000 **and/or** is discharging from an existing or proposed vehicle wash pad (without a MVWDW¹) through a pre-treatment device if the following conditions are met:

- i. The pre-treatment device is discharging to groundwater of the State of Nevada;
- ii. There is no public or community sewage system available within four hundred (400) feet of the facility's nearest property line (NAC 444.786);
- iii. There is no commingling of discharge related to this permit with sanitary wastes;
- iv. The facility does not allow the use of degreasers or emulsifiers and prohibits engine and undercarriage washing;
- v. The facility only uses detergents that are approved for use with the pre-treatment device that are biodegradable, free of solvents and pre-approved by the Division;
- vi. There is at least a five foot separation between the bottom of the subsurface fluid distribution system and/or surface infiltration basin(s) and seasonal groundwater;
- vii. The surface infiltration basin(s) is not a vertical well (i.e. a well that is deeper than it is wide) in excess of six feet below ground surface; and
- viii. The non-floating liquid phase of the discharge sampled from the second chamber, outfall or sampling port of the pre-treatment device meets discharge limits set forth in Part I.B.5.a.

Discharge limits have been imposed for certain typical organic and metal constituents associated with service fluid waste streams.

Table 1: Constituents required to be sampled to verify eligibility and annually thereafter

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Constituent	Discharge Limit (MCL or background) ¹ (mg/L)	EPA Method (Analyze liquid as a water sample; analyze sludge by TCLP method)	
Antimony	0.006 or background ¹	200.8*	
Arsenic	0.010 or background ¹	200.8*	
Barium	2 or background ¹	200.8*	
Beryllium	0.004 or background ¹	200.8*	
Cadmium	0.005 or background ¹	200.8*	
Chromium	0.10 or background ¹	200.8*	
Ethylene glycol	Monitor & report	8015b	
Lead	0.015** or background ¹	200.8*	
Mercury	0.002 or background ¹	200.8* or 245.1	
Thallium	0.002 or background ¹	200.8*	

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Table 1 Cont.: Constituent	Discharge Limit (MCL or background) ¹ (mg/L)	EPA Method (Analyze liquid as a water sample; analyze sludge by TCLP method)
Volatile Organic Compounds	MCLs	8260B
(65 compounds, see Attachment B)		
including:		
Benzene	0.005	
Toluene	1	
Ethylbenzene	0.7	
Xylene	10	
MTBE	0.020 or 0.2***	
Total Dissolved Solids (TDS)	1000 or background ¹	160.1
Turbidity	Monitor & report	180.1
Total Petroleum Hydrocarbons	25	8015b
(TPH-gas, TPH-diesel, and TPH-oil)		

¹ Discharge limits for all facilities covered under this permit are Federal or State Drinking Water Standards (Maximum Contaminant Levels) unless the Permittee has demonstrated a background concentration for one or more constituents that was reviewed by and approved by the Division at the time of NOI submittal per I.B.7.

BMP Plan Requirements: A BMP plan is now required to be submitted with the NOI for Division approval. A BMP plan must be prepared in accordance with good engineering practice and include the following:

- a. Site Maps;
- b. Description of Location, Facility and Drainage System;
- c. General Housekeeping Practices;
- d. Inspection and Maintenance Schedule;
- e. Hazardous Material Storage, Handling and Disposal;
- f. Spill Prevention and Control;
- g. Employee Training;
- Identification of other Treatment or Source Control practice designed to reduce contamination of surface runoff (e.g. – secondary containment, filter strips);
- i. Implementation Schedule for any new BMPs;
- j. List of any solvents or detergents with the potential to impact the oil/water separator;
- k. Sampling protocol;
- 1. Corrective Action Plan; and
- m. Description of facility activities.

Design plans must be submitted and approved by the Division prior to construction or issuance of the permit. If effluent from the pretreatment device is discharged to a subsurface fluid distribution system, the disposal area must be designed according to current commercial septic

^{*} If EPA Method 200.8 can't be used by the laboratory, see EPA's Approved Methods for Inorganic Chemicals and Other Contaminants at http://www.epa.gov/safewater/methods/inch_tbl.html. Detection limits must be at least as low as primary or secondary drinking water standards where applicable.

^{**} The limit for lead is a health advisory limit, the limits for MTBE are site-specific target levels, and the other limits are Maximum Contaminant Levels (MCLs) set by the U.S. EPA and adopted by the State of Nevada.

^{***}Discharge limit is 0.020 mg/l for sites within 1000 feet of receptors and/or sensitive environments or 0.2 mg/L for sites with incomplete exposure pathways (based on NDEP Oxygenated Fuel Corrective Action Guidance Document, 10/98.)

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regulations. Design plans must be stamped by a State of Nevada registered professional engineer and approved by the Division prior to issuance of coverage under the general permit. The Division must review all changes to the approved plans.

Monitoring and Reporting Requirements: Annual water and sludge quality monitoring (for the constituents in Table 1) is required to be submitted to the Division by September 30th. An annual fee is required for each facility by July 1st.